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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,687	07/10/2003	Robert Schmidt	MB 373	1604

7590 02/05/2004  
KLAUS J. BACH & ASSOCIATES  
PATENTS AND TRADEMARKS  
4407 TWIN OAKS DRIVE  
MURRYSVILLE, PA 15668

EXAMINER

CHANG, CHING

ART UNIT PAPER NUMBER

3748

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/616,687

**Applicant(s)**

SCHMIDT ET AL.

**Examiner**

Ching Chang

**Art Unit**

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☒ Claim(s) 2, and 4-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07102003</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:  
- " cylinder part 102 " on Page 6 appears to be – cylinder part 101 --.  
Appropriate correction is required.

### ***Claim Objections***

1. Claims 1-6 are objected.  
The use of the word " particularly " should be avoided in claim 1, it renders the language following said word indefinite. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. ***Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stolk et al. (US Patent No. 6,352,059) in view of Lechner (US Patent No. 6,318,325), and further in view of Ule et al. (US Patent No. 4,000,756).***

Stolk discloses an operating system (See Fig. 1) for a hydraulic valve clearance control element (10) of an internal combustion engine having a hydraulic fluid (34) with a pressure that depends on the engine operating state, in electro-magnetically operated valves (2), the said hydraulic valve clearance control element, comprising a cylinder part (24) and a piston part (25) defining a pressure chamber (26) having a hydraulic fluid supply opening (14), said piston part (102) being movable to said cylinder part with changing volume of said pressure chamber between opposite end positions, said pressure chamber being in communication with a pressurized hydraulic fluid source (34) by way of said hydraulic fluid supply openings, a one way valve (28) disposed in said hydraulic fluid supply opening which is closed when the hydraulic pressure of said hydraulic fluid sources is below the hydraulic pressure in said pressure chamber (See Fig. 4).

Stolk discloses the invention, however, fails to disclose the said hydraulic valve clearance control element having a block valve and a hydraulic fluid drain including a passage.

The patent to Lechner on the other hand, teaches that it is conventional in the art of hydraulic compensation, to utilize a hydraulic valve-play compensation element (See Fig. 1), the said compensation element, comprising a block valve (5) arranged upstream of said one way valve, said blocking valve being open only when the pressure of the

fluid supply for said valve clearance control element is above a predetermined value, a hydraulic fluid drain including a passage (21) for returning leakage fluid from said pressure chamber to said fluid supply when said blocking valve is open, wherein the said hydraulic fluid is lubricating oil of the engine lubricating oil circuit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the hydraulic valve-play compensation element as taught by Lechner in the Stolk system, since the use thereof would provide an improved system with a hydraulic valve compensation element for an electromagnetic operated engine valve.

The modified Stolk system discloses the invention as recited above, however, fails to disclose means being arranged for releasing hydraulic fluid so as to cause said blocking valve to be closed.

The patent to Ule on the other hand, teaches that it is conventional in the art of an electro-hydraulic system, to utilize means (68, 27) for releasing hydraulic fluid so as to cause a blocking valve (18) to be closed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the means as taught by Ule in the modified Stolk system, since the use thereof would provide an improved hydraulic operating system for an electromagnetic operated engine valve.

The applied Stolk reference has a common assignee and two common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35

U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

***Allowable Subject Matter***

4. Claims 2, 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Cosma et al. (US Patent No. 5,619,9965).
- Kabasin (US Patent No. 5,570,621).
- Buente (US Patent No. 4,633,827).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (703)306-3478. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (703)308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Patent Examiner

A handwritten signature in black ink, appearing to read "Ching Chang".

Ching Chang

A handwritten signature in black ink, appearing to read "Ths Den".

THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700